



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

R

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/442,977	11/18/1999	DR. MARTIN MAASS	99-P-7370-US	6618

7590 10/06/2003  
SIEMENS CORPORATION  
INTELLECTUAL PROPERTY DEPARTMENT  
186 WOOD AVENUE SOUTH  
ISELIN, NJ 08830

EXAMINER

MILLER, CARL STUART

ART UNIT PAPER NUMBER

3747

DATE MAILED: 10/06/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/442,977

Applicant(s)

MAASS, DR. MARTIN

Examiner

Carl S. Miller

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41, 43-47 and 49-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4, 14-20, 33-41, 43-47 and 49-53 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-9 is/are rejected.
- 7) ☒ Claim(s) 54 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

The following is a quotation of 35 U.S.C. 103 (a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,3,5,6,7,8 and 9, are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Tanaka.

Davis disables a second set of pumps (35) after starting by connecting these pumps to a bypass. While the two sets of pumps are serially connected at starting, the other set (34) is never connected to the bypass (i.e. chamber (76)). Furthermore, "normally" is not clearly defined in the claims and since the bypass is open at all times except starting then it can be said that it is "normally" open.

Tanaka applies as noted in the last Office action.

It would have been obvious to use a solenoid actuator to open and close fluid flow to the pistons of Davis since such an actuator is used to open and close the

Art Unit: 3747

bypass of Tanaka. For the broader claims, it is only necessary to note that the two sets of pistons in Tanaka are of different sizes, as is common in the art when additional fuel outputs are selectively required.

Claims 4, 14-20 and 33-41,43-47 and 49-55 are allowed.

Claim 54 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's arguments filed April 14, 2003 have been fully considered but they are not persuasive.


In particular, applicant continues to argue that the pistons of Davis are of identical size. While this is true, Tanaka clearly teaches making the extra set of pistons a smaller size and this is commonly the case in the art. Davis has been used as the primary reference because the extra set of pistons is controlled via a bypass and this is the method used by applicant. Davis reads on applicant's rejected claims completely except for the relative size of the pistons. The claims still rejected do not require only two pistons or only three pistons, therefore the fact that all of the pistons are in sets is of no consequence. In order to obtain applicant's system, as defined in the rejected claims, all one has to say is that it would have been obvious to make the starting (or

Art Unit: 3747

additional fuel set of pistons) a smaller size. Tanaka teaches that this is commonly done since only a small amount of additional fuel is needed at starting.

Finally, applicant will note the claim 54 is objected to because this is the only claim which requires that the at least two pistons lie in the same plane with the plane perpendicular to the drive shaft.

Any inquiry concerning this communication should be directed to Carl Miller at telephone number 703-308-2653.

  
Carl S. Miller  
Primary Examiner